

30. (As Previously Added) A method as in claim 14, further comprising the step of stitching one end section to said blood vessel.

31. (As Previously Added) A method as in claim 22, further comprising the step of bunging the blood vessel.

32. (As Previously Added) A method as in claim 31 wherein said bunging step comprises bunging said blood vessel using said widener.

33. (As Previously Added) A method as in claim 22, further comprising the step of exerting pressure outwardly on said stent with said widener during a withdrawal of said catheter from said blood vessel.

Claim 34 has been cancelled.

REMARKS

Claims 14-34 were examined. The claims have been amended and cancelled as noted above. Reexamination and reconsideration in view of the above amendments and the following remarks are respectfully requested.

The examined claim set included two independent claims. Independent apparatus claim 34 has now been cancelled, and the following remarks will be directed particularly at independent method claim 14.

The method of the present invention comprises improved endarterectomy methods where removal of the tunica-intima layer of a blood vessel, such as the superficial femoral artery or the carotid artery, creates a unique problem. Not only is the layer missing over a rather lengthy region of the artery, but there is also an exposed end of the native tunica-intima at the downstream end of the section which has been removed. This exposed end section is particularly susceptible to blood flow disturbances and restenosis. The present invention is directed at both replacing the removed tunica-intima layer with a neo-tunica-intima layer and an anchoring the downstream end sections of the native tunica-intima layer.

Claim 14, as now amended, is particularly directed at positioning an artificial blood vessel layer within a treated blood vessel after the inner layer (i.e. tunica-intima layer) has been removed through a surgical incision. The artificial blood vessel layer includes a stent at one end, and the stented end is introduced through the incision. The artificial blood vessel layer is then positioned so that the stented end is located over an end flap located downstream from the incision. Because of the nature of an endarterectomy procedure, the end flap is usually positioned away from the incision and disposed so that blood flow impinges against the flap, tending to separate the flap from the blood vessel. The present invention, as set forth in amended claim 14, overcomes this problem while simultaneously relining the entire "endarterectomized" length of the vessel. None of the art suggests such a method.

While the device of Lentz might arguably be useful in the method of the present invention (although there is no teaching that the graft material would permit tissue ingrowth as is preferred in the present invention), Lentz is unrelated to endarterectomy and provides no teaching that the end of the graft structure is to be used to reinforce the downstream flap of native tunica-intima after an endarterectomy procedure.

While the Examiner is certainly correct that the Lau et al. '721 patent teaches the use of the conventional stent for tacking up a blood vessel flap, that patent is related to post-angioplasty treatment and nowhere suggests that the inner layer of the blood has been removed in the procedure. Moreover, the Lau patent nowhere suggests that a stent should could be used for simultaneously reinforcing one end section of an inner layer created by an endarterectomy procedure as well as relining the endarterectomized length.

For these reasons, Applicant believes that all remaining claims, as presently amended, clearly distinguish the combination of Lentz and Lau et al., as relied on by the Examiner in rejecting independent claim 14.

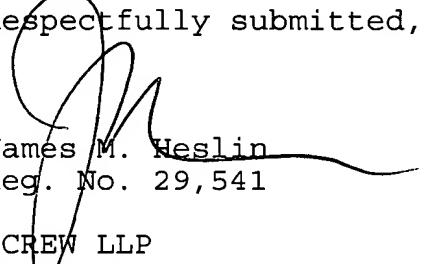
D

Applicants respectfully note that the secondary references relate only to alternative expansion catheters. Neither of these references are remotely related to endarterectomy procedures, nor would they suggest the use of a structure, such as that taught in Lentz, following an endarterectomy procedure.

In view of the above amendments and remarks, Applicants believe that all remaining claims are now in condition for allowance and request that the application be passed to issue at an early date.

If for any reason the Examiner believes that a telephone conference would in any way expedite prosecution of the subject application, the Examiner is invited to telephone the undersigned at (650) 326-2400.

Respectfully submitted,


James M. Heslin
Reg. No. 29,541

TOWNSEND and TOWNSEND and CREW LLP
Two Embarcadero Center, 8th Floor
San Francisco, California 94111-3834
(650) 326-2400
(650) 326-2422 fax
JMH/cms/kh